

## Design sheet - ramps

### Ramps

#### Use of ramps

Ramps - both external and internal - connect different levels and are essential for wheelchair users and useful for others such as parents with pushchairs, shoppers with trolleys and some older people. They need to be designed and detailed with care if they are to have real practical value.

Disabled people not in wheelchairs, and some older people, find ramps - particularly long ones - inconvenient or difficult, and prefer to use steps. Therefore a ramp should always be associated with steps in close proximity, which should also be carefully designed.

#### Building Regulations

Ramps designed in new buildings need to comply with the Part M of the Building Regulations. In existing buildings, while Part M equivalence is desirable, this may not always be possible. However, there are key issues such as gradient (see Design guidance, below) which should be adhered to for reasons of practicability and safety.

#### Disability Discrimination Act 1995

Service providers under the DDA need to be aware of physical adjustments that could be made to their premises, as from 2004 they will be required to consider making 'reasonable adjustments' to remove or alter physical features which create barriers to access to their goods and services. Many service providers are using the time between now and 2004 to plan and implement physical adjustments, so that by 2004 they can be confident that they have responded positively to the Act. For example, a typical High Street shop may have a single step to the front door, with no alternative entrance from the street. It may be possible, depending on a number of factors - mainly space available just outside or just inside the door - to install a permanent ramp with adjacent alternative step.

#### Planning permission

Approval may be necessary for a ramp at the front of a building. If the building is listed or in a conservation area any proposed design will also need to be in character with the building, which may impose additional constraints, particularly where space is limited. English Heritage guidelines Easy Access to Historic Properties (see Useful publications) features case studies of access improvements in conservation areas and listed buildings.

#### Design guidance

- Ramps are essential to enable wheelchair users and people with pushchairs to overcome level changes, but should be accompanied by steps for ambulant disabled people where steeper than 1:20.
- In Part M of the Building Regulations, a gradient of 1:20 is considered level, 1:15 is adequate and 1:12 is the absolute maximum. The preferred gradient is 1:15 or less. The steeper the ramp, the shorter the length between level landings (see Figure 1 and Figure 3).
- Ensure 1000mm min clear width (see Figure 2).
- Handrails: 45-50mm max outside diameter, to each side, continuous to ramps and landings
- Handrails should be provided and formed from materials that are not cold to the touch, for example hardwood or nylon-coated steel.
- The handrail should be easily distinguishable from its background for the benefit of people with sight impairments.
- Avoid patterning which simulates steps, such as applied or inserted slip-resistant strips.
- Surface materials should be slip-resistant, firmly fixed and easy to maintain.
- In existing buildings where an extreme level change would require a long, circuitous ramp or where space is limited, a short-rise lift may be appropriate.
- It is not recommended to use corduroy tactile warnings to indicate ramps, as these are properly used to indicate the start of a flight of steps or stairs.

#### Temporary ramps

In situations where for whatever reason a permanent ramp cannot be installed in an existing building, a temporary ramp may be a preferred solution (though when designing new buildings this would not be acceptable).

Temporary ramps, especially long or heavy ones, can be awkward to handle. It may also be difficult to provide a top landing of recommended size. A rise of 600mm at a gradient of 1:12 is an effective maximum in most instances. They should be firm and secure in use.

Suppliers This list of suppliers of purpose-made and commercially available ramps is not exhaustive but gives an idea of the range and is for guidance only. Full details should be obtained from suppliers direct and if possible an example inspected before purchase.

Enable Access  
Fixed and mobile ramps  
Tel: 020 8275 0375

Jetmarine Ramps  
Lightweight, portable, non-slip, for semi-permanent installations  
Tel: 0161 487 1648  
Fax: 0161 483 7820  
Email: [sales@jetmarine.co.uk](mailto:sales@jetmarine.co.uk)  
Website: [www.jetmarine.co.uk](http://www.jetmarine.co.uk)

Portaramp  
Module ramps, portable  
ramps, anti-slip plates  
Tel: 01842 750186  
Fax: 01842 750229  
Website: [www.portaramp.uk.com](http://www.portaramp.uk.com)  
Rolac Ltd  
Portable, permanent and  
semi-permanent ramps  
Tel: 0161 429 8477

Technotrak  
Fibreglass ramps in four  
lengths and various colours  
Tel: 01202 632894  
Fax: 01202 625929

Thor World Industries Ltd  
Wide range of ramps  
Tel: 01246 260981  
Fax: 01246 260493

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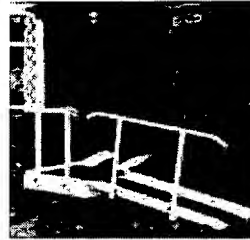
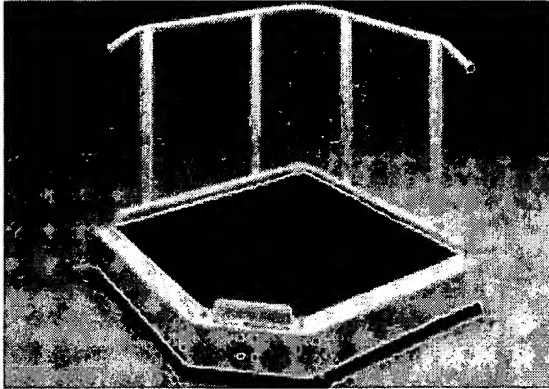
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## ACCESS RAMP SYSTEMS

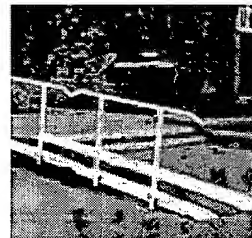
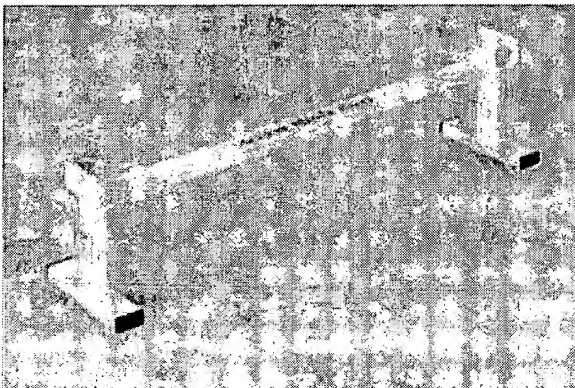
### Adjustable Height Platform



- Allow ramp systems to be turned through 90 degrees
- Quickly and easily sited
- Fully adjustable feet allow for positioning on uneven ground
- Handrail separates into two sections for ease of storage
- Ample turning space available for large wheelchairs

Ramp Type	Length	Internal Track Width	Overall Width	Weight
Adjustable Platform	48"/1220mm Square	48"/1220mm Square	48"/1220mm Square	22kg

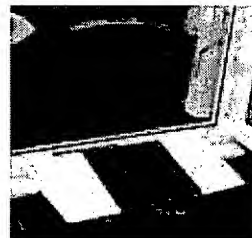
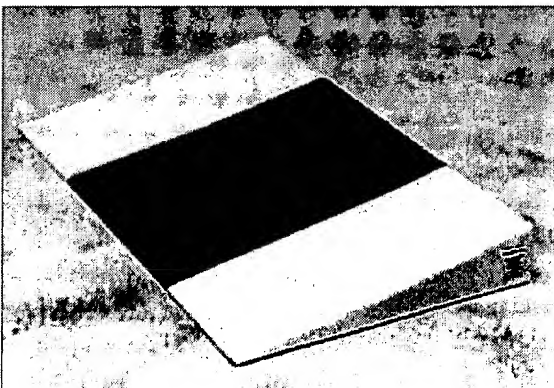
### Joining Plinth



- Allows two ramps to be joined and on for extended runs
- Ramps position securely on locating pins
- Manufactured from powder coated steel
- Available in various heights

Ramp Type	Length	Internal Track Width	Overall Width	Weight
Joining Plinth	N/A	N/A	36"/760mm	5kg

### Door Threshold



- Overcomes wooden/UPVC door thresholds
- Allows door to open and close when in position
- Customised to the height of your door frame 12mm - 125mm
- Provides door frame protection
- Lightweight

Ramp Type	Length	Internal Track Width	Overall Width	Weight
Door Threshold	17"/430mm	30"/760mm	30"/760mm	2kg

**For Advice on solving all your access problems contact us**

**Jetmarine Ltd**, Unit1, National Trading Estate  
Bramhall Moor Lane, Hazel Grove, Stockport,  
Cheshire, England SK7 5AA

Telephone: 0161-487 1648 Fax: 0161-483 7820

E-Mail: [sales@jetmarine.co.uk](mailto:sales@jetmarine.co.uk)

**Benefits of Jetmarine Portable Access Ramps**

- Lightweight And Portable
- Carrying Capacity of 250 Kg (40 Stone)